



Portable Oil Purification Solutions

Powered by Wainbee Expertise



Removal of water & gases from hydraulic, lube oils and transformer oil



Custom built solutions



Available for PURCHASE or RENTAL



Wainbee Filtration
Engineered Systems and Solutions

A Partnership You Can Count On

Wainbee is a market leader and trusted solution partner in Motion & Control, Filtration and Automation solutions. Wainbee is also known as the parent company of **Filtramax**, which is now considered our Filtration product group. Our filtration specialists work with globally recognized brands and have over 30 years of experience providing customized solutions for all your Industrial and Process Filtration needs. We work with you to determine the optimum level of filtration and design systems for your plant reliability to give you peace of mind.

Engineered Systems, Products and Services

Since 1957, Wainbee has been supplying components and engineered systems to customers in a wide range of industries. By partnering with customers across a multitude of markets we are able to design new or enhance existing systems.

Coast-to-Coast Technical Support

As the market leader and one of Canada's largest industrial distributors, Wainbee has 16 offices with a comprehensive team of engineering and technical staff coast to coast. Our sales and tech teams are equipped to provide technical support from all our products, across all market and industry segments, for your application and productivity success.

Unsurpassed Customer Service

Wainbee is an employee-owned and managed Canadian company. We pursue excellence in our technical expertise, solutions and service, take pride in the work we do, and bring the best practices to our customers.

ADVANTAGES OF WAINBEE'S FILTRATION GROUP

We are structured to act as a field service team

By continuously being available to the plants, we are able to respond quickly, help identify potential problems and constantly seek out new opportunities to improve performance, reduce maintenance costs and extend machinery life.

We cover all aspects of filtration

We look at each item closely to assess performance and outcomes. We treat filtration as a critical functional component, not a commodity.

We represent proven products

We partner with manufacturers whose products and solutions outperform the competition, and have the ability to recommend the correct products to meet customer's specifications and demands, and not be held to a specific supplier's product limitations.



FXPVS Portable Oil Purification System

FXPVS Portable Purification Unit delivers vacuum dehydration wherever you need it. The system purifies lube and hydraulic tanks by removing particulates, as well as free and dissolved water/gases. Removing these contaminants extends oil life, thereby reducing oil disposal and replacement costs. This vacuum dehydrator is conveniently portable, and able to purify a system's oil on-site, even in the most demanding environments.

Features and Benefits

- Compact size
- Automatic operation
- Vacuum Dehydration Process removes water, gases and solid particles
- Easy access cleanouts
- Available to PURCHASE or RENT

All Models:

Seal material is Fluorocarbon with EPR optional; max. vacuum: 25 in. Hg; max outlet pressure: 60 PSI / 4.1 bar. Max viscosity: Disposable: 500 sus (108 cSt); Packed Tower: 2150 sus (460 cSt)



Model:	FXPVS 185	FXPVS 600	FXPVS 1200	FXPVS 1800	FXPVS 2700
Flow rate (gpm / lpm)	5 / 18.9	10 / 37.9	20 / 75.7	30 / 113.6	45 / 170.3
Height (in. / mm)	65 / 1651	65 / 1651	65 / 1651	66 / 1676	66 / 1676
Width (in. / mm)	33 / 838	33 / 838	44 / 1092	42 / 1068	42 / 1068
Length (in. / mm)	48 / 1219	48 / 1219	61 / 1549	73 / 1854	73 / 1854
Weight (lb. / kg)	650 / 295	900 / 408	1550 / 703	2550 / 1157	2550 / 1157
Condensate tank (gal / litres)	4.1 / 15.5	4.1 / 15.5	8.3 / 31.4	8.3 / 31.4	8.3 / 31.4
Dispersal elements	1	2	4	8	8
Min. operating capacity (gal / litres)	5 / 18.9	6 / 22.7	11 / 41.6	18 / 68.1	18 / 68.1
Inlet ports	¾" JIC male	1" JIC male	1½" NPTF	2" NPTF	3" NPTF
Outlet ports	¾" JIC male	1" JIC male	1" JIC male	1½" JIC	2" NPTF
FLA (Amps)	15-41	24-38	30-48	40-65 @ 460V	50-70 @ 460V

Purifying your oil with an FXPVS Unit doesn't cost it pays!

Water and Other Impurities in Industrial Oil

Water in lubrication and hydraulic fluids takes two forms: free and dissolved. The dissolved water cannot be seen, but once the concentration of water exceeds the saturation point, the water appears as cloudiness in the oil. If this oil is allowed to settle, the water will separate from the oil as free water. If free water exists, we can conclude that dissolved water is also present in the oil. In addition to water, gases and particulates tend to accumulate in industrial oil.

The Problems Oil Impurities Cause

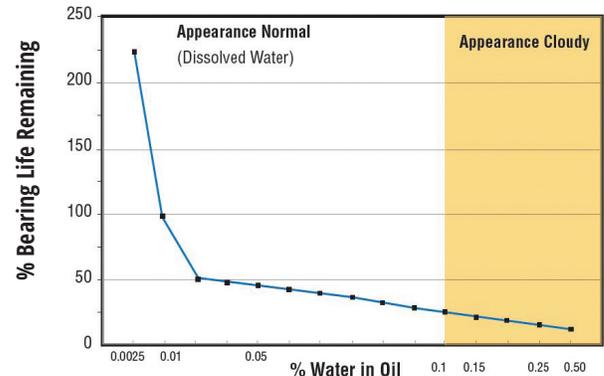
Water, gases and particulates in a lubrication and hydraulic system can cause serious problems such as:

- Abrasive wear in hydraulic components
- Pump cavitation
- Fluid breakdown resulting in the reduction of lubricating properties of oil
- Reduced dielectric strength
- Additive precipitation and oil oxidation

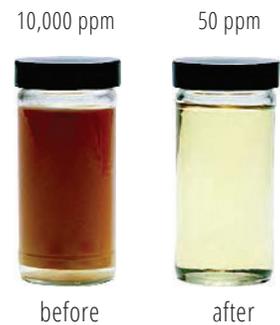
Reduced bearing life is one of the most severe consequences of water in lubricating oil. The graph on the left shows that even if no water is visible (the unshaded area on the left of the graph) bearing life is drastically reduced. For example, a bearing that lasts 6 months operating in oil with a 0.05% (500 PPM) water content, will last almost 4 times as long if the water level is only 0.005% (50 PPM).

Effect of Water in Oil on Bearing Life

(based on 100% life at 0.01% water in oil.)

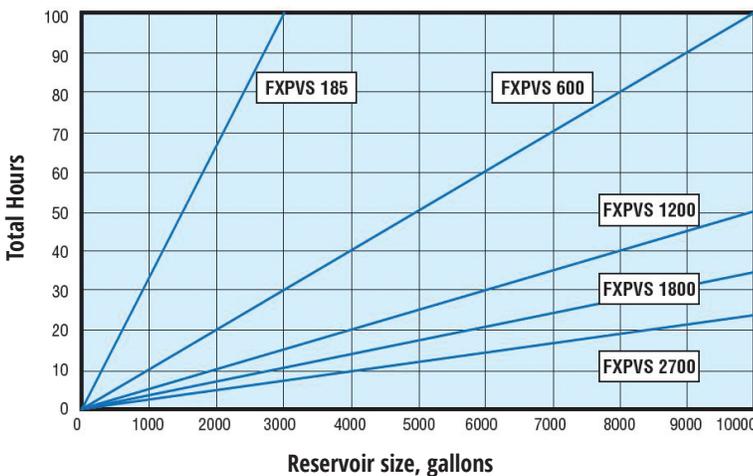


Reference: "Machine Design" July 86, "How Dirt and Water Effect Bearing Life" by Timken Bearing Co.



Samples show the dramatic improvement after contaminated fluid has been purified by an FXPVS 600 system for only 62 mins.

FXPVS Estimated Water Removal Time 5000 PPM(0.5%) to 150 PPM (0.015%)



Typical Performance (FXPVS 600)

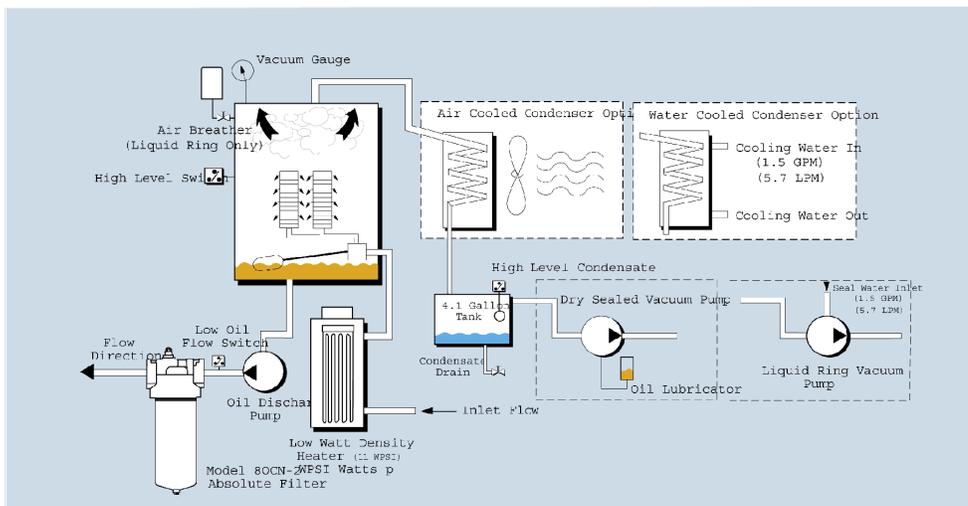
Tank Size	60 gallons (227 litres)	
Run Time	62 mins	
Water Content (PPM)	Start	10,000 PPM (1.0%)
	Stop	50 PPM (0.005%)
Contamination Level	Start	ISO 21/18/16
	Stop	ISO 16/14/11

Purifying your oil with an FXPVS Unit doesn't cost it pays!

How the Filtramax Oil Purification System Works

- Contaminated oil is drawn into the Filtramax portable purification system by a vacuum of 25 in. Hg.
- The oil is heated to an optimum temperature of 150°F (66°C) by a low watt density heater.
- Then it enters a distillation column where it is exposed to a vacuum through the use of special dispersal elements that increase the exposed surface area of the oil. The water in the oil is vaporized and drawn through a condenser with a vacuum pump.
- The condensed water vapor flows into a condensate tank where it accumulates until the tank is emptied as part of routine maintenance.
- The water-free oil falls to the bottom of the distillation column and is removed by a heavy duty oil pump. This pump forces the dry oil through a high efficiency synthetic particulate removal filter.
- Finally, clean oil leaves the back of the unit and returns to the lubrication or hydraulic system reservoir.

FXPVS 600 Vacuum Dehydration Process



Features	Advantages	Benefits
Compact size	<ul style="list-style-type: none"> Smallest envelope in the industry Ease of portability 	<ul style="list-style-type: none"> Fits through doorways and down narrow aisles Encourages use
Condensate holding tank	<ul style="list-style-type: none"> Captures removed water/solvents Large enough to provide long service interval 	<ul style="list-style-type: none"> Eliminates potential hazard of exhausting to atmosphere Reduces maintenance costs
Programmable thermostat	<ul style="list-style-type: none"> Maintains oil within 1°F Prevents overheating oil 	<ul style="list-style-type: none"> Unattended operation Increases oil life
Automatic operation	<ul style="list-style-type: none"> Unattended use 	<ul style="list-style-type: none"> Reduces labor costs Increases running time
Reverse pole switch/ phase fail	<ul style="list-style-type: none"> Changes motor rotation for different power source locations 	<ul style="list-style-type: none"> Flexibility, less maintenance Prevents incorrect rotation
Highest efficiency reducing water levels to 5 PPM	<ul style="list-style-type: none"> Efficient water removal time Minimizes downtime 	<ul style="list-style-type: none"> Increases oil life Increases system life
Moisture Indicator Sensor	<ul style="list-style-type: none"> Detects water saturation % in oil 	<ul style="list-style-type: none"> Minimizes unit run time
Variable Flow Circuit	<ul style="list-style-type: none"> Raises oil temperature more quickly 	<ul style="list-style-type: none"> Starts purification process quicker Saves energy

Other Available Equipment for Purchase or Rental

Des-case Portable Filter Cart



Model No.	DCSFH-02EB5B3	Notes
Flow rate	2 GPM	<ul style="list-style-type: none"> • ISO cleanliness level ISO 16/14/11 or better • Compatible with all petroleum based hydraulic fluid. Contact us for use with other fluids.
Electrical	120 VAC	
Weight	150 lbs	
Length	18.8 in	
Width	21.5 in	
Height	45.7 in	

Schroeder Diesel Fuel Purification Unit - BDC



Model No.	BDC39QPMLZ3VAVM	Notes
Flow rate	25 GPM	<ul style="list-style-type: none"> • Removes water down to 25 ppm in a single pass • ISO cleanliness level ISO 12/11/7 or better when using Z1 media • Compatible with ULSD15 and similar petroleum diesels, Biodiesel blends, Synthetic diesel and blends.
Electrical	115 VAC	
Weight	785 lbs	
Length	41 in	
Width	40 in	
Height	64 in	

Schroeder Filter Cart



Model No.	MFD109Z10ZZ03B07G2320	Notes
Flow rate	7 GPM	<ul style="list-style-type: none"> • ISO cleanliness level ISO 16/14/11 or better • Compatible with all petroleum based hydraulic fluid. Contact us for use with other fluids.
Electrical	115 VAC	
Weight	102 lbs	
Length	19 in	
Width	16.5 in	
Height	40 in	

Schroeder Filter Cart 10 gpm



Model No.	MFD-BC-109-H10-H05	Notes
Flow rate	10 GPM	<ul style="list-style-type: none"> • ISO cleanliness level ISO 16/14/11 or better • Compatible with all petroleum based hydraulic fluid. Contact us for use with other fluids.
Electrical	115 VAC	
Weight	102 lbs	
Length	19 in	
Width	16.5 in	
Height	40 in	

Integrated Motion & Control, Filtration and Automation Solutions

Hydraulics



- Pumps & Motors
- Valves & Manifolds
- Cylinders & Rotary Actuators
- Accumulators & Thermal Systems
- Hoses, Fittings & Instrumentation

Pneumatics



- Valves
- Actuators & Grippers
- FRL Units & Compressors
- Air Pressure Amplifiers
- Air Motors & Gas Springs
- Tubing, Fittings & Instrumentation
- Vacuum Products

Electromechanical & Drive Control



- Electric Actuators
- Stepper & Servo Motors
- AC-DC Drives
- Cartesian & Gantry Systems
- HMI, Sensors & Controls

Filtration



- Hydraulic Filters
- Air Dryers
- Breathers
- Nitrogen Gas Generators
- Filter Carts
- Portable Purification Units

Material Handling, Tools & Clamping



- Hoists & Balancers
- Handling Devices & Conveyors
- Pneumatic & Electric Tools
- Clamps & Aluminum Framing
- ADE

Customized Systems & Services



- Hydraulic Power Units
- Mobile Vehicle Integration
- Aircraft Testing Systems
- Pressure Testing Systems
- Control Panel Systems
- Filtration Systems
- Engineering & Consulting



Wainbee is a market leader in engineered systems, products and services for motion & control, filtration and automation solutions. With a comprehensive team of sales professionals, technical support and engineering staff coast to coast, we bring innovative and integrated systems, high quality products and customer focused services to help our customers solve their application challenges.